

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/776,521B
Source: IFWO
Date Processed by STIC: 5/26/05

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 05/26/2005

PATENT APPLICATION: US/10/776,521B

TIME: 12:19:01

Input Set : D:\SEQLIST (8449-405 substitute II).TXT

Output Set: N:\CRF4\05262005\J776521B.raw

4 <110> APPLICANT: Fletchner, Jessica
5 Prince-Cohane, Kenya
6 Mehta, Sunil
7 Slusarewicz, Paul
8 Andjelic, Sofija
9 Barber, Brian

11 <120> TITLE OF INVENTION: IMPROVED HEAT SHOCK PROTEIN-BASED VACCINES AND
12 IMMUNOTHERAPIES

14 <130> FILE REFERENCE: 8449-405-999

16 <140> CURRENT APPLICATION NUMBER: 10/776,521B

17 <141> CURRENT FILING DATE: 2004-02-12

19 <150> PRIOR APPLICATION NUMBER: 60/503,417

20 <151> PRIOR FILING DATE: 2003-09-16

22 <150> PRIOR APPLICATION NUMBER: 60/463,746

23 <151> PRIOR FILING DATE: 2003-04-18

25 <150> PRIOR APPLICATION NUMBER: 60/462,469

26 <151> PRIOR FILING DATE: 2003-04-11

28 <150> PRIOR APPLICATION NUMBER: 60/447,142

29 <151> PRIOR FILING DATE: 2003-02-13

31 <160> NUMBER OF SEQ ID NOS: 419

33 <170> SOFTWARE: FastSEQ for Windows Version 4.0

35 <210> SEQ ID NO: 1

36 <211> LENGTH: 4

37 <212> TYPE: PRT

38 <213> ORGANISM: Malaria

40 <400> SEQUENCE: 1

41 Asn Ala Asn Pro

42 1

45 <210> SEQ ID NO: 2

46 <211> LENGTH: 9

47 <212> TYPE: PRT

48 <213> ORGANISM: Unknown

50 <220> FEATURE:

51 <223> OTHER INFORMATION: HLA-A2 peptide binding motif

53 <220> FEATURE:

54 <221> NAME/KEY: VARIANT

55 <222> LOCATION: 2

56 <223> OTHER INFORMATION: Xaa = Leu or Met

58 <220> FEATURE:

59 <221> NAME/KEY: VARIANT

60 <222> LOCATION: 6

61 <223> OTHER INFORMATION: Xaa = Val or Ile or Leu or Thr

63 <220> FEATURE:

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64 <221> NAME/KEY: VARIANT
65 <222> LOCATION: 9
66 <223> OTHER INFORMATION: Xaa = Val or Leu
68 <220> FEATURE:
69 <221> NAME/KEY: VARIANT
70 <222> LOCATION: 1, 3, 4, 5, 7, 8
71 <223> OTHER INFORMATION: Xaa = any amino acid
73 <400> SEQUENCE: 2
W--> 74 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
75 1 5
78 <210> SEQ ID NO: 3
79 <211> LENGTH: 9
80 <212> TYPE: PRT
81 <213> ORGANISM: Unknown
83 <220> FEATURE:
84 <223> OTHER INFORMATION: HLA-A2 peptide binding motif
86 <220> FEATURE:
87 <221> NAME/KEY: VARIANT
88 <222> LOCATION: 2
89 <223> OTHER INFORMATION: Xaa = Leu or Met
91 <220> FEATURE:
92 <221> NAME/KEY: VARIANT
93 <222> LOCATION: 1, 3, 4, 5, 6, 7, 8
94 <223> OTHER INFORMATION: Xaa = any amino acid
96 <400> SEQUENCE: 3
W--> 97 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Val
98 1 5
101 <210> SEQ ID NO: 4
102 <211> LENGTH: 8
103 <212> TYPE: PRT
104 <213> ORGANISM: Unknown
106 <220> FEATURE:
107 <223> OTHER INFORMATION: HLA-A2 peptide binding motif
109 <220> FEATURE:
110 <221> NAME/KEY: VARIANT
111 <222> LOCATION: 2
112 <223> OTHER INFORMATION: Xaa = Val or Gln
114 <220> FEATURE:
115 <221> NAME/KEY: VARIANT
116 <222> LOCATION: 1, 3, 4, 5, 6, 7
117 <223> OTHER INFORMATION: Xaa = any amino acid
119 <400> SEQUENCE: 4
W--> 120 Xaa Xaa Xaa Xaa Xaa Xaa Leu
121 1 5
124 <210> SEQ ID NO: 5
125 <211> LENGTH: 5
126 <212> TYPE: PRT
127 <213> ORGANISM: Unknown
129 <220> FEATURE:

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130 <223> OTHER INFORMATION: HLA-DR peptide binding motif
132 <400> SEQUENCE: 5
133 Gln Lys Arg Ala Ala
134 1 5
137 <210> SEQ ID NO: 6
138 <211> LENGTH: 5
139 <212> TYPE: PRT
140 <213> ORGANISM: Unknown
142 <220> FEATURE:
143 <223> OTHER INFORMATION: HLA-DR peptide binding motif
145 <400> SEQUENCE: 6
146 Arg Arg Arg Ala Ala
147 1 5
150 <210> SEQ ID NO: 7
151 <211> LENGTH: 7
152 <212> TYPE: PRT
153 <213> ORGANISM: Unknown
155 <220> FEATURE:
156 <223> OTHER INFORMATION: motif in heptamiric region recognized by heat
157 shock protein
159 <220> FEATURE:
160 <221> NAME/KEY: VARIANT
161 <222> LOCATION: 2
162 <223> OTHER INFORMATION: Xaa = Trp or any amino acid
164 <220> FEATURE:
165 <221> NAME/KEY: VARIANT
166 <222> LOCATION: 1, 3, 5, 7
167 <223> OTHER INFORMATION: Xaa = hydrophobic amino acid residues
169 <220> FEATURE:
170 <221> NAME/KEY: VARIANT
171 <222> LOCATION: 4, 6
172 <223> OTHER INFORMATION: Xaa = any amino acid
174 <400> SEQUENCE: 7
W--> 175 Xaa Xaa Xaa Xaa Xaa Xaa Xaa
176 1 5
179 <210> SEQ ID NO: 8
180 <211> LENGTH: 7
181 <212> TYPE: PRT
182 <213> ORGANISM: Unknown
184 <220> FEATURE:
185 <223> OTHER INFORMATION: motif in heptamiric region recognized by heat
186 shock protein
188 <220> FEATURE:
189 <221> NAME/KEY: VARIANT
190 <222> LOCATION: 2
191 <223> OTHER INFORMATION: Xaa = Trp or any amino acid
193 <220> FEATURE:
194 <221> NAME/KEY: VARIANT
195 <222> LOCATION: 1, 3, 5, 7,

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196 <223> OTHER INFORMATION: Xaa = hydrophobic amino acid residue, particularly
197     tryptophan, leucine or phenylalanine
199 <220> FEATURE:
200 <221> NAME/KEY: VARIANT
201 <222> LOCATION: 4, 6
202 <223> OTHER INFORMATION: Xaa = any amino acid
204 <400> SEQUENCE: 8
W--> 205 Xaa Xaa Xaa Xaa Xaa Xaa Xaa
206 1 5
209 <210> SEQ ID NO: 9
210 <211> LENGTH: 4
211 <212> TYPE: PRT
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: mutated heat shock protein peptide
217 <400> SEQUENCE: 9
218 Lys Asp Glu Leu
219 1
221 <210> SEQ ID NO: 10
222 <211> LENGTH: 10
223 <212> TYPE: PRT
224 <213> ORGANISM: Adeno Virus
226 <400> SEQUENCE: 10
227 Ser Gly Pro Ser Asn Thr Pro Pro Glu Ile
228 1 5 10
231 <210> SEQ ID NO: 11
232 <211> LENGTH: 11
233 <212> TYPE: PRT
234 <213> ORGANISM: Lymphocytic Choriomeningitis Virus (LCMV)
236 <400> SEQUENCE: 11
237 Ser Gly Val Glu Asn Pro Gly Gly Tyr Cys Leu
238 1 5 10
241 <210> SEQ ID NO: 12
242 <211> LENGTH: 10
243 <212> TYPE: PRT
244 <213> ORGANISM: Lymphocytic Choriomeningitis Virus (LCMV)
246 <400> SEQUENCE: 12
247 Lys Ala Val Tyr Asn Phe Ala Thr Cys Gly
248 1 5 10
251 <210> SEQ ID NO: 13
252 <211> LENGTH: 9
253 <212> TYPE: PRT
254 <213> ORGANISM: Lymphocytic Choriomeningitis Virus (LCMV)
256 <400> SEQUENCE: 13
257 Arg Pro Gln Ala Ser Gly Val Tyr Met
258 1 5
261 <210> SEQ ID NO: 14
262 <211> LENGTH: 9
263 <212> TYPE: PRT

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Input Set : D:\SEQLIST (8449-405 substitute II).TXT

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264 <213> ORGANISM: Lymphocytic Choriomeningitis Virus (LCMV)

266 <400> SEQUENCE: 14

267 Phe Gln Pro Gln Asn Gly Gln Phe Ile

268 1 5

271 <210> SEQ ID NO: 15

272 <211> LENGTH: 9

273 <212> TYPE: PRT

274 <213> ORGANISM: Influenza Virus

276 <400> SEQUENCE: 15

277 Ile Glu Gly Gly Trp Thr Gly Met Ile

278 1 5

281 <210> SEQ ID NO: 16

282 <211> LENGTH: 10

283 <212> TYPE: PRT

284 <213> ORGANISM: Influenza Virus

286 <400> SEQUENCE: 16

287 Thr Tyr Val Ser Val Ser Thr Ser Thr Leu

288 1 5 10

291 <210> SEQ ID NO: 17

292 <211> LENGTH: 8

293 <212> TYPE: PRT

294 <213> ORGANISM: Influenza Virus

296 <400> SEQUENCE: 17

297 Phe Glu Ala Asn Gly Asn Leu Ile

298 1 5

301 <210> SEQ ID NO: 18

302 <211> LENGTH: 9

303 <212> TYPE: PRT

304 <213> ORGANISM: Influenza Virus

306 <400> SEQUENCE: 18

307 Ile Tyr Ser Thr Val Ala Ser Ser Leu

308 1 5

311 <210> SEQ ID NO: 19

312 <211> LENGTH: 9

313 <212> TYPE: PRT

314 <213> ORGANISM: Influenza Virus

316 <400> SEQUENCE: 19

317 Thr Tyr Gln Arg Thr Arg Ala Leu Val

318 1 5

321 <210> SEQ ID NO: 20

322 <211> LENGTH: 9

323 <212> TYPE: PRT

324 <213> ORGANISM: Influenza Virus

326 <400> SEQUENCE: 20

327 Cys Thr Glu Leu Lys Leu Ser Asp Tyr

328 1 5

331 <210> SEQ ID NO: 21

332 <211> LENGTH: 8

333 <212> TYPE: PRT

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/776,521B

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Input Set : D:\SEQLIST (8449-405 substitute II).TXT
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. ~~1,2,3,4,5,6,7,8,9~~
Seq#:3; Xaa Pos. ~~1,2,3,4,5,6,7,8~~
Seq#:4; Xaa Pos. ~~1,2,3,4,5,6,7~~
Seq#:7; Xaa Pos. ~~1,2,3,4,5,6,7~~
Seq#:8; Xaa Pos. ~~1,2,3,4,5,6,7~~
Seq#:295; Xaa Pos. 7
Seq#:296; Xaa Pos. 3
Seq#:301; Xaa Pos. 2,6
Seq#:348; Xaa Pos. 5

VERIFICATION SUMMARY

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Input Set : D:\SEQLIST (8449-405 substitute II).TXT

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L:74 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:97 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:495 M:283 W: Missing Blank Line separator, <400> field identifier
L:3737 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:295 after pos.:0
L:3756 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:296 after pos.:0
L:3831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:301 after pos.:0
L:4494 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:348 after pos.:0